

REMARKS

This Amendment and Response to Final Office Action is being submitted in response to the final Office Action mailed July 7, 2005. Claims 1-9 are pending in the Application. Claims 1-9 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

In response to the above rejection, Claims 1, 3, and 7 have been amended to further clarify the subject matter which Applicant regards as the invention and Claims 5 and 9 have been canceled, without prejudice or disclaimer to continued examination on the merits. These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added. Based upon the amendments, reconsideration of the Application is respectfully requested in view of the following remarks.

Rejection of Claims 1-9 Under 35 U.S.C. 112, first paragraph:

Claims 1-9 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Examiner indicates that the Claims contain subject matter which was not described in the Specification in such a way as to reasonably convey to one skilled in the relevant art that the Inventor, at the time the Application was filed, had possession of the claimed invention. Specifically, Examiner indicates:

Claim 1 contains the following features which fail to meet the written description requirement:

“grouping a plurality of packets” is not found anywhere in the specification, the closest reference with regard to a “group” is found on pages 2, 6-7 and 9. These pages include references to groups of STS-1 links only, and do not suggest any type of “grouping” of packets. Further, the word packet cannot be found anywhere in the specification outside of the claims. The Examiner concludes that the references in the specification made to “grouping” are limited in scope to a plurality of

links and not packets. Therefore, the claim language of claim 1 does not meet the written description requirement.¹

In response to this rejection, independent Claim 1 has been amended to recite:

Claim 1. A method for intelligent packet forwarding over a network, comprising:

providing a virtual port comprising a grouping of one or more STS-1s allocated to a particular client and an amount of bandwidth associated with the grouping;

assigning the grouping to a predetermined data flow path from a source port to a destination port, the predetermination made expressly for the grouping; and

establishing the predetermined data flow path for the grouping from the source port to the destination port.

Likewise, independent Claim 3 has been amended to recite:

Claim 3. An apparatus for intelligent packet forwarding over a network, said apparatus comprising:

a grouping device that ***provides a virtual port comprising a grouping of one or more STS-1s allocated to a particular client and an amount of bandwidth associated with the grouping;***

an assignment device that assigns the grouping to a predetermined data flow path from a source port to a destination port, the predetermination made expressly for the grouping; and

a path identifier for identifying a data flow path extending from said source port to said destination port and notifying each of said ports of said data flow path.

Thus, these claims now nearly exactly mimic the language found on page 1 of the Specification, namely “[i]n accordance with the present invention there is provided a method and apparatus for ***intelligent packet forwarding*** utilizing ***virtual ports*** defined by ***a grouping of one or more STS-1s*** allocated to source and destination I/O devices (***client***) connected to an N x STS-1 SONET network.” It should be noted, because this is being submitted in response to a final office action, that the substance of independent

¹ Final Office Action, pp. 2-3.

Claims 1 and 3 remains as previously presented, the terminology has merely been revised to agree more closely with that presented in the Specification.

As has been argued previously, with regard to Ellis et al. (U.S. Patent No. 6,256,292), Ellis et al. teach a system that transports SONET-formatted asynchronous transfer mode signals and/or a synchronous transfer mode signal on a line-switched ring network having a unidirectional path. The system uses various STS-1s to carry data through the network. The STS-1 may be transferred from one O/E interface (50) to another O/E interface (60) in the network ring. The data flow is controlled by the STS management 70. See column 12, line 11 through column 13, line 20. The STS-1s are individually transferred through the nodes and the O/E interface. Further, the STS-1s follow the same data flow path through the ring from a source point to a destination point.

In contrast, the embodiments of the present invention provide a plurality of packets grouped together based upon the client to which the packet is allocated and bandwidth capability of the packets. The grouping is assigned to a particular data flow through the network that is specific to the particular grouping characteristics. Therefore, although the same source and destination points may be desired, depending upon the group and characteristics, a different data flow path will be implemented from the source point to the destination point. Thus, data flow is improved through the network.

Applicants again respectfully submit that Ellis et al. do not teach grouping a plurality of packets together to form a grouping based on each of the plurality of packets allocation to a particular client and the amount of bandwidth allocated to each of the plurality of packets, assigning the grouping to a determined data flow path from a source port to a destination port, the determination made expressly for the grouping, and establishing the determined data flow path for the grouping from the source port to the destination port.

Further, Ellis et al. do not teach a grouping device that groups a plurality of packets together to form a grouping based on each of the plurality of packets allocation to a particular client and the amount of bandwidth allocated to each of the plurality of packets, an assignment device that assigns the grouping to a determined data flow path from a source port to a destination port, the determination made expressly for the grouping, and a path identifier for identifying a data flow path extending from said source port to said destination port and notifying each of said ports of said data flow path.

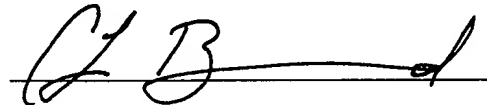
Therefore, Applicant submits that the rejection of Claims 1-9 under 35 U.S.C. 112, first paragraph, has now been overcome and respectfully requests that this rejection be withdrawn and that these claims be allowed, Claims 5 and 9 having now been canceled.

CONCLUSION

Applicant would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,

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